Speech by Deputy Prime Minister, Coordinating Minister for National Security and Minister for Home Affairs, Mr Teo Chee Hean, on Climate Change at the Committee of Supply Debate, 1 March 2012

I thank Dr Teo Ho Pin, Dr Lam Pin Min and Mr Charles Chong for their questions on climate change. The world's climate is changing and the unusual number of extreme weather calamities may be a prelude to what is to come if no action is taken. As Members have highlighted, Singapore is a low-lying island and we are vulnerable to the effects of climate change. We must prepare ourselves for this challenging future.

Twin Goals: Economy and Environment

Singapore has long strived to achieve the twin goals of growing the economy and protecting the environment. We have switched from fuel oil to natural gas, the cleanest form of fossil fuel, for most of our power generation. We are also possibly the only country to cap vehicle growth and price vehicle usage in accordance with congestion and the impact this makes on our living environment.

As global resources become scarcer, we will need to accomplish more – with less. We can achieve economic growth in a sustainable manner by developing and deploying energy-efficient and clean technologies. Investments and capability development in this area will give Singapore a competitive advantage. This will help contribute to our economic vibrancy, even as we reduce our carbon footprint over the long term, which Dr Lam asked about.

At the same time, we need to enhance our resilience towards climate change. For example, we have made plans to protect our coasts and to improve our drainage. Singapore's coastal reclamation sites were previously required to be at a minimum level of 1.25 metres above the highest recorded tide levels. This has now been raised by an additional 1 metre to safeguard against projected sea level rises by the year 2100. We will also build our expertise in climate science and modelling, and study the diverse impacts of climate change. So we will be investing in capabilities in these areas.

Vision: A Climate Resilient Global City poised for Green Growth

Dr Teo and Mr Chong asked about our measures for engaging the public, private and people sectors in combating climate change.

Our vision for Singapore is a climate-resilient global city that is well-positioned for green growth. Our National Climate Change Strategy and plans will be set out in greater details in a document called the National Climate Change Strategy 2012 (NCCS-2012).

As part of the preparation work, the National Climate Change Secretariat (NCCS), together with the agencies under the Inter-Ministerial Committee on Climate Change (IMCCC), conducted consultations with a wide range of stakeholders from September 2011 to January 2012. Various channels were used to reach different segments of the public, including an online consultation portal, focus group discussions and public forums. The public forums were held in partnership with the five Community Development Councils (CDCs) to reach out to grassroots leaders and residents on how they could play a part to address climate change. I would like to thank Dr Teo, Dr Lam and Dr Amy Khor for chairing the forums organised in their respective CDCs. I also commend Dr Teo for his town council's efforts to save energy, fight climate change, and also save money for those living in his town council. In all, we received over 1,000 comments from stakeholders and

members of the public.

National Climate Change Strategy 2012 (NCCS-2012) will be released in the middle of this year. It will explain what the Government is doing on climate change, as well as what individuals, households and businesses need to do to collectively tackle this challenge effectively. In addition, the messages regarding climate change will also be disseminated through various avenues such as public exhibitions, the mass media and school curriculum, to reach out to more stakeholders.

Update on Sustainable Singapore Blueprint

Dr Lam asked for an update of the goals laid out in the Sustainable Singapore Blueprint. Progress has been made towards the targets listed in the Sustainable Singapore Blueprint, which fall into the broad categories of energy efficiency, water consumption, recycling, air quality, and green and blue spaces.

In the area of energy efficiency, we have implemented programmes that target the household, industry, transport and building sectors. For example, NEA has introduced a number of programmes to provide assistance to companies to encourage them to design energy efficient facilities, conduct energy audits, train energy managers and invest in energy efficient equipment or technologies. NEA has implemented the Mandatory Energy Labelling Scheme (MELS) for household air-conditioners, refrigerators and clothes dryers, which are energy intensive electrical appliances. Since Sep 2011, Minimum Energy Performance Standards (MEPS) were also set for household air conditioners and refrigerators, which remove the most inefficient models from the market by prohibiting the sale of appliances that fall short of a specified minimum energy efficiency level. They help consumers avoid being locked into the high operating cost of inefficient appliances. MEPS also encourages suppliers to bring in more energy efficient appliances as technology improves.

In lowering our domestic water consumption from 165L per capita in 2003 to 153L in 2011, PUB implemented initiatives such as the mandatory water efficiency labelling scheme (MWELS). MWELS was introduced in 2009 to help consumers make more informed purchasing decisions and encourage suppliers to introduce more water efficient products into the market. MWELS covers water fittings such as taps and mixers, dual-flush low capacity flushing cisterns (LCFCs), urinal flush valves and waterless urinals. As part of the scheme, suppliers are required to label the water efficiency of their appliances on all displays, packaging and advertisements.

Singapore's recycling rate increased from 40% in 2000 to 58% in 2010. Since 2009, all condominiums and private high-rise apartments are required to provide recycling bins or bags for residents. Coupled with the National Recycling Programme (NRP) for HDB and private landed estates, all households now have access to recycling facilities.

To reduce our levels of fine particulate matters, NEA has announced mandatory Euro V emissions standards for new diesel vehicles from Jan 2014 and mandatory registration standards for off-road diesel engines from July 2013. To ensure good air quality, NEA will regularly review emission standards for industry and transport.

For blue spaces, we plan to open up 900ha of reservoirs and 100 km of waterways by 2030 for recreational activities. As of Jan 2012, 795 ha of reservoirs and 81 km of waterways were opened for recreational use.

For green spaces, we aim to meet the target of 4200 ha of parkland in Singapore by 2020. We currently have 3822 ha of parkland, and also 200 km of park connectors, including the recently-opened North Eastern Riverine Loop, which is 26km long, and connects Buangkok, Hougang, Punggol and Sengkang towns, which Dr Lam is familiar with.

Everyone Has a Part to Play

Indeed, everyone has a part to play, and to make the needed adjustments. Industries, developers and households must adopt energy-saving practices. Mr Charles Chong asked about the environmental standards for new buildings. The Building and Construction Authority has set minimum environmental sustainability standards through its Green Mark Scheme for new buildings1 since 2008. Government will take the lead by requiring new public sector buildings2 to achieve the Green Mark Platinum rating, which is the highest standard. Just last Sunday, I was at the new Pasir Ris Sports Complex when BCA recognised it as the 1,000th Green Mark building in Singapore.

To facilitate this transition to a "greener" Singapore, the government will introduce new policies and legislation, including those which would help consumers make informed choices. Several of these measures will be announced by the ministries under the Inter-Ministerial Committee on Climate Change (IMCCC) during their respective Committee of Supply (COS) debates. For example, MOT will introduce a new Carbon Emissions-based Vehicle Scheme (CEVS) to encourage car buyers to switch to vehicles with lower emissions. MEWR will raise the Minimum Energy Performance Standards (MEPS) for air-conditioners and refrigerators in 2013 as well as extend it to lighting in 2014. MTI will work with MEWR to extend the Grant for Energy Efficient Technologies (GREET) scheme to continue support for energy-intensive industries. MTI will also pilot repayable financing schemes to catalyse private sector investments in energy efficiency.

Dr Teo also asked about our desired outcomes. We have set a target of reducing our emissions by 7 - 11% below business-as-usual levels in 2020. This will be raised to 16% below business-as-usual levels in 2020, if there is a global agreement on climate change.

International Efforts

Every nation, big or small, will be affected by climate change, and will have to work together to address it. Many countries have implemented or are looking to introduce policies to cut their emissions. A key decision at the Climate Change talks in November last year in Durban, countries have agreed to start negotiations on a new climate change framework for post-2020. This will require all countries to do more. Singapore supports international efforts to reduce emissions and we will play our part.

Long Term Emission Reductions

To achieve more emission reductions over time will require behavioural adjustments and changes to business processes. We will need to consider more stringent energy efficiency standards and legislation, along with measures taken by other countries. Further measures that need to be considered include putting a price on carbon emissions, especially if there is a new binding global framework. Where these measures result in additional costs, the government will assist our stakeholders, especially the more needy, through policies such as grants and rebates where appropriate.

I am encouraged by the results of a recent public perception survey commissioned by the National Climate Change Secretariat (NCCS) which showed that there is strong support for climate change action among Singapore residents. 86% of the respondents felt that they play a part in taking action on climate change. 58% of those surveyed also stated that Singapore should take steps to address climate change even if it involves some cost.

To prepare ourselves, a Working Group under the Inter-Ministerial Committee on Climate Change (IMCCC) will study how we can stabilise our long term emissions. This will be challenging, given our limited ability to draw significantly on alternative energy such as solar, wind or nuclear. The government will adopt a pragmatic approach and pace the implementations of policies

appropriately so that our economy and our people will adapt to the new environment.

Investments in R&D and Opportunities

There are also opportunities arising from climate change. We can create high-value jobs for Singaporeans and enable our economy to benefit from a green growth trajectory if we continue to strengthen our R&D capabilities and attract investments in green industries. We are well-positioned to tap on the opportunities in this transition to a clean energy future.

Realising our Vision

Sir, we need a whole-of-nation effort – involving the people, the private, and the public sectors to realise our vision. Together, we can ensure that Singapore remains a vibrant and liveable nation for our future generations.

Thank you, sir.

Footnotes

- 1 Gross Floor Area above 2,000 sqm
- 2 Air-conditioned floor area above 5,000 sqm